

Smosarski, W.

Cienie obłoków na tle nieba i ich związek ze światłem dnia. Ombres de nuages sur le fond du ciel et leur relation avec la lumière du jour. Warsaw. 1916. p. 777-800. 26 $\frac{1}{2}$ cm. (Soc. des sciences de Varsovie. Comptes rendus. 1916. 9 an. Fasc. 7.)

Kilka obserwacji zanikania obłoków kłębiastych. Quelques observations sur la disparition des nuages. Poznań. 1921. 12 p. 22 $\frac{1}{2}$ cm.

Niezwykła szadź i osołowy szron. Ausserordentliche Rauheisbildung und sonderbarer Reif. Warsaw. 1918. p. 432-442. 25 $\frac{1}{2}$ cm. (Soc. des sciences de Varsovie. Comptes rendus. 1918. 11 an. Fasc. 4.)

O pewnym typie obłoków. Sur un type de nuages. Warsaw. 1915. p. 366-377. 25 $\frac{1}{2}$ cm. (Soc. des sciences de Varsovie. Comptes rendus. 1915. 8 an. Fasc. 6.)

Spitaler, Rudolf.

Das Klima des Eiszeitalters. Prag. 1921. 138 p. 31 cm.

Sutton, J. R.

Sun spots and earth temperatures. (Reprint from Roy. soc. of S. Africa. Trans., Capetown. v. 10, pt. 1, 1921. p. 57-59.)

Rainfall and the pressure gradient. (Reprint from Roy. soc. of S. Africa. Trans., Capetown. v. 10, pt. 1, 1921. p. 61-64.)

U. S. Bureau of standards.

Testing of thermometers. 3d ed. Washington. 1921. 18 p. 25 $\frac{1}{2}$ cm. (Circ. no. 8.)

U. S. Weather bureau.

Instructions for the installation and maintenance of Marvin water-stage registers with specifications, by Roy N. Covert. Washington. 1921. 23 p. 23 cm. (Instrument division, Circ. J.)

RECENT PAPERS BEARING ON METEOROLOGY AND SEISMOLOGY.

C. F. TALMAN, Professor in Charge of Library.

The following titles have been selected from the contents of the periodicals and serials recently received in the Library of the Weather Bureau. The titles selected are of papers and other communications bearing on meteorology and cognate branches of science. This is not a complete index of all the journals from which it has been compiled. It shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau.

Aérophile. Paris. 29 anné. 1-15 août, 1921.

Roux, G. La météorologie aéronautique. L'Office national météorologique. Les observations météorologiques intéressant la navigation aérienne: organisation, transmission. Leur utilisation par les navigateurs aériens. p. 253-254.

American society of civil engineers. Proceedings. N. Y. v. 47. Sept., 1921.

Grunsky, C. E. Rainfall and run-off studies. p. 203-242.

Munn, James, & Savage, J. L. Flood of June, 1921, in the Arkansas river, at Pueblo, Colorado. p. 167-201.

Aviation and aircraft journal. N. Y. v. 11. Oct. 17, 1921.

Brandl, L. Soaring flight. p. 459.

Bulletin astronomique. Paris. T. 1, fasc. 4, 1921.

Hamy, Maurice. Sur un cas particulier de diffraction des images des astres circulaires. p. 197-212.

Great Britain. Meteorological office. Monthly meteorological charts, East Indian seas. Oct., 1921.

Durst, C. S. Mechanical means of extracting data from meteorological logs and of working up averages.

Great Britain. Meteorological office. Monthly meteorological charts, East Indian seas. Nov., 1921.

Keeton, H. Swell.

Heating and ventilating magazine. New York. v. 18. Oct., 1921.

Greenburg, Leonard. Extent of the experimental error involved in the factoring of katathermometer. p. 37-40.

Humidifying devices for the home. p. 56.

Journal of geography. Chicago. v. 20. Oct., 1921.

Visher, Stephen S. Preparation for teaching climate. p. 252-264.

Kristiania. Geofysiske kommission. Geofysiske publikationer. Christiania. v. 2, no. 1. 1921.

Köhler, Hilding. Zur Kondensation des Wasserdampfes in der Atmosphäre. pt. 1. 15 p.

Meteorological magazine. London. v. 56. Sept., 1921.

Brooks, C. E. P. Could the drought of 1921 have been forecasted? p. 211-215.

Cave, C. J. P., & others. Units for meteorological work. p. 221-223.

Chree, C. Diurnal variation in atmospheric pollution and in electrical potential gradient. p. 205-208.

Dines, L. H. G. Humidity observations as an aid to estimating cloud-height. p. 226-228.

Gold, E. Meeting of the International commission for the scientific investigation of the upper air, at Bergen. p. 215-217. [See Aug. REVIEW, p. 461.]

J. H. Results of the ball lightning inquiry. p. 208-211.

Priestley, Charles F. Visibility on the Firth of Clyde. p. 224.

Nature. London. v. 108. 1921.

Fisher, Willard J. Duration of sunrise and sunset. p. 211-212. (Oct. 13.)

Rayleigh. Occurrence of the aurora line in the spectrum of the night sky. p. 208. (Oct. 13.)

Physical review. Lancaster, Pa. v. 18. Aug., 1921.

Dorsey, Herbert Grove. Peculiar ice formations. p. 162-164.

King, Louis V. On the measurement of the acoustic output and efficiency of fog-alarm apparatus. p. 120-121.

Mauchly, S. J. Note on the diurnal variation of the atmospheric-electric potential-gradient. p. 161-162.

Popular astronomy. Northfield, Minn. v. 29. Oct., 1921.

Wylie, Charles Clayton. Effect of the barometric gradient on meridian observations. p. 479-481.

Royal society of London. Philosophical transactions. London. ser. A. v. 222. 1921.

Walker, George W. Problem of finite focal depth revealed by seismometers. p. 45-56.

Royal society of South Africa. Transactions. Capetown. v. 10. pt. 1, 1921.

Sutton, J. R. Rainfall and the pressure gradient. p. 61-64.

Sutton, J. R. Sunspots and earth temperatures. p. 57-59.

Science. New York. v. 54. 1921.

Meisinger, C. LeRoy. Determining the true mean temperature. p. 276-277. (Sept. 23.) [Abstr. from Mo. WEATHER REV., Apr., 1921. pp. 226-229.]

Curtis, Heber D. On sounds accompanying auroral displays. p. 301-302. (Sept. 30.)

Brooks, Charles F. Grand aurora of September 1-2, 1921 (at Silver Lake, N. H., lat. 43.9° N.). p. 329-330. (Oct. 7.)

Scientific American. New York. v. 125. Oct. 1, 1921.

Winters, S. R. Getting a line on the higher atmospheres. p. 233-243. [Description of Fergusson's meteorograph.]

Società meteorologica italiana. Bollettino bimestrale. Torino. v. 40. Lug.-Sett., 1921.

Betttoni, Pio. Lo studio delle sease. p. 42-46.

Crestani, Giuseppe. Le nubi a brandelli. p. 39-42. [Proposes the common name *fracti* for fracto-cumulus, fracto-nimbus and fracto-stratus. This suggestion is slightly modified in an appendix.]

Di Vestea, A. La pioggia considerata su piani verticali orientali (pioggia obliqua). p. 58-59. [Abstract.]

Gabba, Giovanni Celoria. p. 37-39. [Obituary.]

Marini, Luigi. Note climatiche per le principali città costiere dell'Adriatico. Venezia. p. 46-58.

Wetter. Berlin. 38. Jahrg. Juli/Aug., 1921.

Freybe, O. Die Wettervorhersagen von Hinselmann. p. 115-116.

Huber, U. Eine Fata Morgana am Monte Rosa. p. 102-104.

Knoch, K. Die Beziehungen zwischen dem Massenenschwärmen der Kriebelmücken und der Lufttemperatur. p. 113-114.

Molly. Schnelle Wolkenbildung durch Rauch. p. 119-120.

Naegler, Wilhelm. Normalkalender für Temperatur und Niederschlag in Deutschland. p. 106-109.

Peppler, W. Einige neuere Arbeiten über die Verwendung der Zirren für die Wettervoraussage. p. 118-119.

Peppler, W. Ueber "brecherartige" Wolkenformen. p. 97-102.

Wussow, G. Die Schneefälle und Gewitterregen im Mai 1921 in Nord-Deutschland. p. 109-112.